

APPENDIX 4.1

State Hazard Mitigation Capability Assessment

To set the stage for a mitigation strategy it is imperative to know the capability of the community to perform mitigation, regulate, and design outreach. Reducing hazards is a priority for Louisville Metro and the Commonwealth of Kentucky. State regulations affect all of Kentucky and each local community is subject to them. However, a community may adopt laws that are even more restrictive.

Among the best examples of hazard mitigation in State government are the floodplain management program, the dam safety program, and the FEMA-funded State administered hazard mitigation programs. However, a number of other programs, funding sources, executive orders, and interagency agreements have elements that can support or facilitate hazard mitigation. The state's capability is the foundation of similar capabilities by local government.

The State Authorities, Programs and Resources Capability Assessment and the State Hazard Mitigation Capability Assessments follow.

State Authorities, Programs and Resources Capability Assessment

The following Capability Assessment Matrix identifies the most significant local funded or local administered programs, related regulations, or practices with respect to hazard mitigation or loss reduction. Many of the listed programs provide funding for various hazard mitigation activities.

STATE AUTHORITIES, PROGRAMS AND RESOURCES CAPABILITY ASSESSMENT MATRIX					
Authorities	Effect on Mitigation of Hazards at the County Level				Hazard Mitigation Application
	Pre-disaster	Post-disaster	Affects Development in Hazard prone areas	Capable of Funding Mitigation Initiatives	
Floodplain Management Ordinances	X	X	X	X	County level floodplain ordinances/regulations that regulate development within floodplains through special permitting. These regulations allow the community to participate in the NFIP and makes flood insurance available to its citizens and businesses.
Community Rating System (CRS)	X	X	X	X	The rating system rewards communities that voluntarily take steps beyond the minimum requirements of the NFIP to reduce flood risk and increase the effectiveness of flood insurance protection. Such activities can fall under one or more of the following categories: Flood Preparedness; Flood Damage Reduction; Mapping and Regulations; and Public Awareness.
Zoning Regulations	X		X		KRS 100.201(2) states the local jurisdictions may enact permanent land use regulations, including zoning and other growth management regulations to promote public health, safety, morals, and general welfare of the jurisdiction.
Subdivision Regulations	X	X	X		Subdivision regulations control the division of land into parcels for the purpose of building development or sale. Flood-related subdivision controls typically require that sub dividers install adequate drainage facilities and design water and sewer systems to minimize flood damage and contamination. They prohibit the subdivision of land subject to flooding unless flood hazards are overcome through filling or other measures, and they prohibit filling of floodway areas. Subdivision regulations require that subdivision plans be approved prior to the division/sale of land. Subdivision regulations are a more limited tool than zoning and only indirectly affect the type of use made of land or minimum specifications for structures.
Fire Prevention Codes (State)	X		X		KRS 227.320 Local authorities will adopt and enforce the standards of safety promulgated by the commissioner. Rules and regulations set up by the commissioner prescribes a standard of safety from fire loss; these rules and regulations establish a minimum requirement concerning the matters covered.
Hazardous Materials Ordinance	X	X	X		County level ordinance that regulate the storage and control of hazardous materials and requires reporting of releases of hazardous materials into the environment within the county.

STATE AUTHORITIES, PROGRAMS AND RESOURCES CAPABILITY ASSESSMENT MATRIX					
Authorities	Effect on Mitigation of Hazards at the County Level				Hazard Mitigation Application
	Pre-disaster	Post-disaster	Affects Development in Hazard prone areas	Capable of Funding Mitigation Initiatives	
Stormwater Management Plans - required by Municipal Separate Storm Sewer System (MS4) Program	X		X		Federal mandated program for Urban Areas as designated by the 2000 Census. The plans must provide six minimum controls on the management of storm water runoff to include; public education and outreach on storm water impacts, Public Involvement/Participation, Illicit discharge detection and elimination, construction site storm water runoff control, and post-construction storm water management in new development and redevelopment.
Kentucky Drought Mitigation and Response Plan	X	X	X		The Kentucky Drought Mitigation and Response Plan fulfills the directive of Senate Joint Resolution 109 December 31, 2008. This plan provides statewide guidance to assess and minimize the impacts of a drought in Kentucky. The plan describes a collaborative approach to accelerate the decision-making processes of state and federal agencies that are necessary to assist local government efforts in drought <i>response</i> .
Programs					
NWS Storm Ready Program	X	X		X	StormReady helps community leaders and emergency managers strengthen local safety programs through education and preparedness training
Local Emergency Operations Plan	X	X	X	X	Establishes policies and provision to coordinate local and state emergency response to natural, technological or war related disasters and emergencies. This plan is reviewed and approved annually.
Mine Subsidence Fund		X	X	X	Provides assistance to property owners in 34 qualified counties that have experienced property damage resulting from collapsed underground coalmines.
Resources					
Local Economic Development Agencies				X	A possible resource for supporting growth and development throughout the county, some counties have economic development authorities some only have foundations
Regional Development Agency				X	Regional resource that assists in the development of a local hazard mitigation plan, grant writing and possible funding sources
Local Emergency Management Agency	X	X	X	X	Conduit for the Local authority to manage and disseminate actions in pre-disaster and post-disaster localities throughout the state.
Local Emergency Planning Committees	X	X	X	X	Review of local emergency operations plan, identifies resources and capabilities at the local level to support emergency management and assistance during disasters

State Hazard Mitigation Capability

The state hazard mitigation capability matrix evaluates pre and post disaster programs in the state. The following matrix identifies the most significant state-funded or state-administered programs involving hazard mitigation or loss reduction. The State Hazard Mitigation Capability Matrix provides an evaluation of the state's programs by identifying:

1. If the program relates to pre or post disaster mitigation actions
2. If the program is currently capable of funding those actions
3. If the actions affect development in hazard-prone areas
4. If the actions affect repetitive loss properties and mitigation activities
5. How the application of the program relates to mitigation actions

Definitions

Pre-Disaster-Programs - Plans, policies, regulations, funding, or practices which include an evaluation of the state's pre-disaster mitigation measures.

Post-Disaster - Programs, plans, policies, regulations, funding, or practices which include an evaluation of the state's post-disaster mitigation measures.

Development in Hazard Prone Areas - Programs, plans, policies, regulations, funding, or practices which include an evaluation of the state's programs for mitigation measures in hazard prone areas.

Capable of Funding Mitigation Initiatives - Programs, plans, policies, and regulations which are currently capable of funding mitigation initiatives.

Repetitive Loss Properties and Mitigation Activities - Programs, plans, policies, regulations, funding, or practices which include an evaluation of the state's programs that affect repetitive loss properties.

Hazard Mitigation Application - Actions the program currently employs in hazard mitigation planning.

The table below shows Programs, Plans, Policies, Regulations, Funding or Practices.

Programs, Plans, Policies, Regulations, Funding or Practices	Pre-Disaster	Post-Disaster	Affects Development in Hazard Prone Areas	Capable of Funding Mitigation Initiatives	Affects Repetitive Loss Properties and Mitigation Activities	Hazard Mitigation Application
Warning Coordinator Meteorologist	X	X		All activities performed by the NWS are funded by NOAA	X	Educating the local population regarding storm safety, flood safety, and lightning safety. 'Turn Around - Don't Drown' is a national effort to help reduce drowning from flash floods. Partner with county and area Emergency Managers to ensure counties are prepared for severe weather events. The Storm Ready Program is a national program which certifies counties are ready to handle severe weather emergencies. Maintains and trains a cadre of weather spotters, to include ham radio operators, who call in a give damage reports and information which can help forecasters to issue better and more timely severe weather and flood warnings.
The KACo Leasing Trust Program (CoLT),	X			X	X	Formed in 1989, was designed to offer county governments and related political subdivisions an efficient method of financing for a wide variety of capital projects, including construction, renovation, equipment purchases or even grant anticipation. Since 1996, CoLT has offered general obligation leases for any governmental purpose. Leases can be made for any amount needed and for terms of 30 days up to 30 years
KY Interchurch Disaster Recovery Program	X	X				Coordinate responses to disasters occurring in the Commonwealth of Kentucky through the Kentucky Interchurch Disaster Recovery Program.
Department for Facilities Management Division of Historic Properties (DHP)	X		X	X	X	All state-owned buildings of fifty years and older are documented in a database. The goal is to ultimately use this information to recommend needed appropriations for the preservation and conservation needs of the most historic structures. Currently, there are over 1,000 entries in the database. DHP is responsible to administer this database.
Renaissance Kentucky	X		X	X	X	Is an effort to unite communities and resources necessary to revitalize and restore the Commonwealth's downtown areas. The Kentucky Department for Local Governments, the new lead agency, partners with the Kentucky Heritage Council, the Kentucky League of Cities, and the Kentucky Housing Corporation, and the Kentucky Transportation Cabinet to implement this program.
Federal Housing Subsidy Programs				X	X	HUD administers housing and community development programs statewide. Programs include single family, multifamily, public housing, Housing Choice Vouchers, homeless, etc.
						Assistance grants and Community Development Block Grant (CDBG) funds. It also administers and monitors Disaster Recovery Assistance grants.
Floodplain Management	X	X	X		X	Based on Executive Order 77-927 (Signed by then governor Julian Carroll), KDOW has been designated as the state coordinating agency for the NFIP. As the coordinating agency, the KDOW assists local governments and state agencies in answering all questions concerning the program.
Floodplain Development Permit Program	X		X		X	Based on KRS 151, KDOW has the primary responsibility for the approval or denial of proposed construction and other activities in the 100-year floodplain of all streams in the Commonwealth. Typical activities permitted are dams, bridges, culverts, residential and commercial buildings, placement of fill, stream alterations or relocations, small impoundments, water, and wastewater treatment plants.

Programs, Plans, Policies, Regulations, Funding or Practices	Pre-Disaster	Post-Disaster	Affects Development in Hazard Prone Areas	Capable of Funding Mitigation Initiatives	Affects Repetitive Loss Properties and Mitigation Activities	Hazard Mitigation Application
Dam Construction Permit Program	X		X		X	The Dam Safety and Floodplain Compliance Section within KDOW reviews and permits dams and hazardous impoundments as defined in KRS 151.100 and 401 KAR 4:030.
Dam Safety Program	X				X	Conducts safety inspections (approximately 300 annually) and initiates emergency action if a structure is in danger of failing, poses a threat to life or may cause serious property damage. KRS 151.297 empowers the Kentucky Energy and Environment Cabinet to take emergency action if an owner abandons a dam or refuses to take necessary action.
KY Watershed Management Initiative	X		X		X	Collaborative partnership between KDOW and over 50 state, federal, and non-profit organizations to guide water quality assessment and planning. Uses geographic boundaries of watersheds to guide planning processes.
Fire Management Program	X					The Division of Forestry is responsible for fighting wild land fires on private lands. Almost 90 percent of fires are caused by humans, with over 55 percent caused by arson. The damage to the Commonwealth's timber resources is valued at \$85.58 per acre.
KY Firewise Program	X			X		Grants may be awarded for projects to reduce the wildfire risk and hazard in Kentucky's wild land/urban interface communities. Grant priority will be given based on community-at-risk level, establishment of a local Firewise Council or Board, and type of project submitted.
Urban Forestry Program	X					This program promotes the proper management of the urban forest including citizen support and a properly trained work force.
Forest Education Program	X			X		This program works to educate the citizens of the Commonwealth about the value of our forests by providing leadership, technical assistance, and financial support.
Reforestation Program	X			X		There are more than a million acres of land in KY which could benefit from tree planting. This program grows and provides trees to certain companies and individuals.
Equipment Loan revolving program	X	X		X		This program was established by the 1948 General Assembly to provide loans to Kentucky's conservation districts for heavy and specialized conservation equipment. Through loan/lease agreements with local contractors and farmers, the districts ensure that this equipment is available at the local level to perform conservation work.
KY Soil Erosion & Water Quality Cost Share Program	X			X		This program was established to assist landowners address existing soil erosion, water quality, and other environmental problems associated with farming or woodland operations.
KY Dept. of Housing, Buildings, and Construction	X					KY Building Code KRS 198B.020. The KBC became effective February 15, 1980, completing Phase I of a three-phase implementation plan. This plan was fully implemented on August 15, 1982. This code is updated annually.
Plan Review Division	X				X	Architectural plans are reviewed prior to construction to ensure compliance with the KY Building Code. There is a plan review fee, which is based on total square footage.
Inspection Division	X					Inspections are made on approved constructions periodically to ensure construction is done according to approved plans. Any variations must be approved. Upon final inspection, an occupancy permit is issued and the case file is transferred to the General Inspection Section in the Division of Fire Prevention for future inspections. The plan review fee includes charges for inspections.

Programs, Plans, Policies, Regulations, Funding or Practices	Pre-Disaster	Post-Disaster	Affects Development in Hazard Prone Areas	Capable of Funding Mitigation Initiatives	Affects Repetitive Loss Properties and Mitigation Activities	Hazard Mitigation Application
State Fire Marshal Fire Prevention	X					Enforces various codes to ensure that all public structures, facilities, and regulated vehicles are maintained in such a manner that all occupants and users of these facilities will be protected from fire, explosion, or other similar hazard.
KyEM Public Assistance Program		X		X	X	The Public Assistance Program provides supplemental Federal disaster grant assistance for the repair, replacement, or restoration of disaster damaged, publicly-owned facilities and the facilities of certain private non-profit organizations. The Federal share of assistance is not less than 75% of the eligible cost for emergency measures and permanent restoration. The state determines how the non-federal share is split among the applicants. The program also allows for mitigation measures to be completed during the restoration phase so that future damages are reduced. The mitigation measure must be identified before repair begins and must be cost effective.
KyEM KY Emergency Operations Plan (KyEOP)	X	X				The KyEOP establishes policies and provisions for coordinating state and federal emergency response to natural, technological, or war related disasters and emergencies. The KyEOP also details preparedness actions to be taken by state and local governments prior to a disaster. This plan provides concepts and procedures, which are to be utilized by local government through local plans written in conjunction with the state plan.
Earthquake Preparedness Program	X		X			Provides coordination and oversight of seismic safety programs, supports public education and mitigation planning, and provides tools to support hazard reduction.
Earthquake Monitoring	X					The Kentucky Seismic and Strong-Motion Network is a series of earthquake-monitoring devices which, over time, are gathering detailed information about earthquake motions in Kentucky. This helps to determine the actual earthquake risk and assists in enacting appropriate building codes.
KGS Advice on Landslide Susceptibility	X					KGS geologists have sponsored workshops for local officials in northern Kentucky on the susceptibility of the region to landslides and provided expertise on recognizing landslide features, mitigating the effects of landslides and responding in the event of a landslide.
KGS Mapping	X					Several current and planned mapping programs at KGS can provide information for careful development. These include sinkhole maps and databases, land-use planning maps, seismic hazard mapping, and landslide susceptibility maps.
KGS Consultations and Evaluations of Landslide Damaged Homes	X					Geologists from KGS have the capability of examining landslides affecting homes and providing professional assessments to help qualify some homes for buyout under FEMA mitigation programs.
Division of State Risk and Insurance Services, RISK System	X	X			X	RISK system is a database that identifies the construction, value, and risk exposures (Flood plain denotation, fire prevention, etc) for all Commonwealth owned properties, both personal and real properties. With this information, insurance is procured on all subject properties to minimize financial loss in the event of a catastrophe.
The State Fire and Tornado Insurance Fund	X	X		X		Provides insurance for real property, office contents, computers, telephones, etc. It is a self-insurance program that provides all risk form coverage on an actual cash basis (ACV) or replacement cost basis (RCV) for state buildings and contents.
Kentucky Transportation Cabinet (KYTC) - Rural and Municipal Aid Program		X		X		Under Emergency and Emergent Provisions, the program provides funding for temporary or permanent restoration work on rural roads.

Programs, Plans, Policies, Regulations, Funding or Practices	Pre-Disaster	Post-Disaster	Affects Development in Hazard Prone Areas	Capable of Funding Mitigation Initiatives	Affects Repetitive Loss Properties and Mitigation Activities	Hazard Mitigation Application
KYTC - County Bridge Replacement Program	X			X		Two phase program. First phase, between 1989-1994 all county bridges on school bus routes identified by a county judge were replaced. The second phase works with remaining state bridges on a case-by-case basis.
KYTC - SAFE Patrol Program		X				SAFE Patrol operators are available through the Transportation Operations Center to assist local, state, and federal authorities in establishing and controlling routes of ingress and egress via the limited-access highway system to affected areas. Possibility exists to bring Roadway Security Branch assets from other geographic regions of the Commonwealth to assist.
The Center for Cave and Karst Studies	X		X			The Center for Cave and Karst Studies, established in 1978 at Western Kentucky University (WKU), was the first center established primarily to deal with karst problems in the U. S. The Center's offices and laboratories are located within the Department of Geography and Geology in the Environmental Science and Technology building at WKU.
The Kentucky Climate Center	X					Historical record of climatic events in Kentucky
Kentucky Weather Preparedness Committee (KWPC)	X	X				The KWPC operates under the support of the KyEM. KWPC is dedicated to raising the awareness of how weather events can impact Kentucky and demonstrating to all citizens how they can better prepare for and protect against potentially life-threatening weather events. The purpose of the committee is to bring attention to Kentucky's weather events and related consequences, educate and prepare Kentuckians for the weather event consequences, and engage in a variety of efforts (e.g., multi-media campaigns, workshops, conferences) designed to raise weather event awareness.